

Health Care Innovation Initiative

# **Executive Summary**

Mastectomy (BCSUR) Episode

## **OVERVIEW OF A MASTECTOMY EPISODE**

The mastectomy episode revolves around patients who receive a mastectomy for breast cancer or prophylaxis. The trigger event is an inpatient admission, observation stay, or an emergency department or outpatient visit with a mastectomy, sentinel lymph biopsy, or an axillary lymphadenectomy procedure. All related care – such as anesthesia, imaging and testing, evaluation and management, and medications – is included in the episode. The quarterback, also called the principal accountable provider or PAP, is the clinician or group who performed the triggering procedure. The mastectomy episode begins 30 days before the triggering procedure and ends 30 days after discharge.

## **CAPTURING SOURCES OF VALUE**

Providers have multiple opportunities during a mastectomy episode to improve the quality and cost of care. Example sources of value include the appropriate use of imaging and testing and choice of mastectomy procedure. In addition, based on the patient's breast cancer stage, appropriate recommendations should be made for use of neoadjuvant and adjuvant antineoplastic therapy and radiation therapy. Overall, the provider can bring about a reduction in readmissions and complications.

# *Illustrative Patient Journey*

Patient may have abnormal findings on mammogram and/or palpable breast mass

## 2 Initial assessment

PCP/OB-GYN/Oncologist office, independent lab or radiology, ASC, outpatient or inpatient hospital

- Patient may be referred for additional diagnostic imaging (e.g., mammogram, ultrasound, MRI)
- Based on imaging findings, results may be called normal or benign; additional follow-up imaging to monitor tumor may be recommended, typically within 6 months
- Patient may be referred for fine needle aspiration, core needle biopsy, and/or surgical biopsy

#### 3 Treatment

Oncologist office, independent lab or radiology, ASC, outpatient or inpatient hospital

#### Patient may undergo:

- Neo-adjuvant therapy to shrink tumor prior to surgery
- Either partial, total, or radical mastectomy
- Sentinel node biopsy and possible lymph node dissection
- Adjuvant therapy following surgery

Patients who had either a total or radical mastectomy may have either immediate or delayed reconstruction (tissue/flap or implants)

## 4 Follow-up care

PCP/OB-GYN/Oncologist office, independent lab or radiology

#### Patient may receive:

- Surveillance scans (e.g., imaging of breast, head, chest, abdomen, pelvis; full body PET scan)
- E&M visits with surgeons, radiation oncologist, and/or medical oncologist

# 5 Potential complications

ASC, independent lab or radiology, outpatient hospital, inpatient hospital

#### Potential complications include:

- Hemorrhage
- Infection
- Open wound
- Pneumothorax
- DVT/PE
- Fluid collection

# Potential Sources of Value



## **ASSIGNING ACCOUNTABILITY**

The quarterback of the episode is the specific health care provider deemed to have the greatest accountability for the quality and cost of care for the patient. To state it differently, the quarterback is the provider who has the greatest ability to influence all of the health care delivered in a given episode. For the mastectomy episode, the quarterback is the clinician or group who performed the triggering procedure. The contracting entity or tax identification number of clinical or group who performed the triggering procedure will be used to identify the quarterback.

## MAKING FAIR COMPARISONS

The episode model is designed to be fair to providers and incentivize best practices without penalizing providers who care for sicker patients. As such, important aspects of the model are:

- Inclusion of only the cost of services and medications that are related to breast cancer surgical treatment in calculation of episode spend.
- Exclusion of episodes when clinical circumstances create the likelihood that the case will deviate substantially from the typical care path or when claims data is likely to be incomplete.
- Risk adjusting episode spend to account for the cost of more complicated patients.

The pre-trigger window of the mastectomy episode includes specific evaluation and management encounters, specific imaging and testing, specific pathology, and specific surgical and medical procedures. During the trigger window, all services and specific medications are included. The post-trigger window includes specific care after discharge, specific anesthesia, specific evaluation and management encounters, specific imaging and testing, specific medications, specific pathology, and specific surgical and medical procedures. Certain procedures related to breast biopsy are excluded from the pre-trigger window. Certain procedures related to breast reconstruction, antineoplastic therapy, and radiation therapy are excluded from all windows.

Some exclusions apply to any type of episode, i.e., are not specific to a mastectomy episode. For example, an episode would be excluded if more than one payer was involved in a single episode of care, if the patient was not continuously insured by the payer during the duration of the episode, or if the patient had a discharge status of 'left against medical advice'. Other examples of exclusion criteria specific to the mastectomy episode include a patient who has end-stage renal disease or who has a history of acute myocardial infarction. These patients have significantly different clinical courses that the episode does not attempt to risk adjust. Furthermore, there may be some factors with a low prevalence or significance that would make accurate risk adjustment difficult and may be used to exclude patients completely instead of adjusting their costs.

For the purposes of determining a quarterback's cost of each episode of care, the actual reimbursement for the episode will be adjusted to reflect risk factors captured in recent claims data in order to be fair to providers caring for more complicated patients. Examples of patient factors likely to lead to the risk adjustment of mastectomy episodes include bilateral mastectomy, cancer metastasis, and tobacco-use disorder. Over time, a payer may adjust risk factors based on new data.

# **MEASURING QUALITY**

The episode reimbursement model is designed to reward providers who deliver cost effective care AND who meet certain quality thresholds. A quarterback must meet or exceed all established benchmarks for any quality metric tied to gain sharing in order to be eligible to receive monetary rewards from the episode model. Other quality metrics may be tracked and reported for quality improvement purposes but may not be tied directly to gain sharing.

The quality metric linked to gain sharing for the mastectomy episode is:

- Partial mastectomy rate: Percentage of valid episodes that undergo a partial mastectomy (higher rate indicative of better performance).
- Surgical complication rate: Percentage of valid episodes with a surgical complication in either the trigger window or post-trigger window (lower rate indicative of better performance).
- Timely clinical registry reporting: Percentage of total episodes (valid and invalid) with complete patient-level clinical factor reporting to the Tennessee Cancer Registry within six months of the episode start date for patients who do not receive a bilateral prophylactic mastectomy (higher rate indicative of better performance).

The quality metrics that will be tracked and reported to providers but that are not tied to gain sharing are:

 Repeat surgery for positive margins: Percentage of valid episodes with repeat surgery for positive margins following a partial mastectomy (lower rate indicative of better performance).  Neoadjuvant radiation: Percentage of valid episodes with neoadjuvant radiation therapy up to 180 days before surgery (lower rate indicative of better performance).

It is important to note that quality metrics are calculated by each payer on a per quarterback basis across all of a quarterback's episodes covered by that payer. Failure to meet all quality benchmarks tied to gain sharing will render a quarterback ineligible for gain sharing with that payer for the performance period under review.